

Cambridge IGCSE[™]

CANDIDATE NAME					
CENTRE NUMBER			CANDIDATE NUMBER		

4049400834

CAMBRIDGE INTERNATIONAL MATHEMATICS

0607/11

Paper 1 (Core) May/June 2024

45 minutes

You must answer on the question paper.

You will need: Geometrical instruments

INSTRUCTIONS

- Answer all questions.
- Use a black or dark blue pen. You may use an HB pencil for any diagrams or graphs.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do not use an erasable pen or correction fluid.
- Do not write on any bar codes.
- Calculators must not be used in this paper.
- You may use tracing paper.
- You must show all necessary working clearly and you will be given marks for correct methods even if your answer is incorrect.
- All answers should be given in their simplest form.

INFORMATION

- The total mark for this paper is 40.
- The number of marks for each question or part question is shown in brackets [].

This document has 8 pages.

Formula List

Area, A, of triangle, base b, height h.

 $A = \frac{1}{2}bh$

Area, A, of circle, radius r.

 $A = \pi r^2$

Circumference, C, of circle, radius r.

 $C = 2\pi r$

Curved surface area, A, of cylinder of radius r, height h.

 $A = 2\pi rh$

Curved surface area, A, of cone of radius r, sloping edge l.

 $A = \pi r l$

Curved surface area, A, of sphere of radius r.

 $A=4\pi r^2$

Volume, V, of prism, cross-sectional area A, length l.

V = Al

Volume, V, of pyramid, base area A, height h.

 $V = \frac{1}{3}Ah$

Volume, V, of cylinder of radius r, height h.

 $V = \pi r^2 h$

Volume, V, of cone of radius r, height h.

 $V = \frac{1}{3}\pi r^2 h$

Volume, V, of sphere of radius r.

 $V = \frac{4}{3}\pi r^3$

Answer **all** the questions.

1 2 3 12 40 60

From the list of numbers, write down all the multiples of 6.

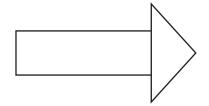
..... [1]

2 A bucket contains 9000 millilitres of water.

Write down the number of litres of water in the bucket.

..... litres [1]

3

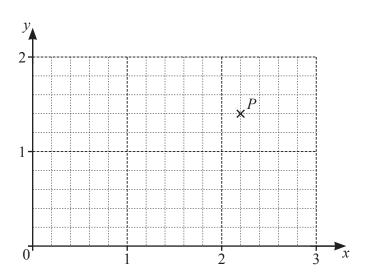


The diagram shows a shape made from a rectangle and a triangle.

(a) On the diagram, draw arrows on two lines that are parallel. [1]

(b) On the diagram, mark an acute angle. [1]

4



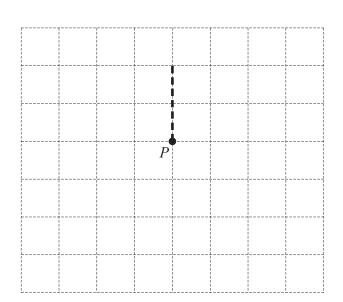
(a) Write down the coordinates of the point P.

(.....) [1]

(b) Plot the point (1.2, 1).

[1]

5 The diagram represents the route of a walker.





A walker starts at point *P* on the diagram and walks:

• 2 squares north, as shown by the dotted line then

19

- 3 squares west and then
- 4 squares south.

13

(a) Find the median.

Complete the route of the walker on the grid.

[2]

6 These are the distances, in km, cycled by eleven cyclists in one week.

12

15

32

24

36

10

18

27

..... km [2]

21

(b) Find the range.

..... km [1]

7 Work out.

 1.2×0.3

.....[1]

8	Work out.					
	$6 - 14 \div 2$					
						[1]
9	A map has a scale of 2 cm rep	resents 5 km.				
	Write this scale as a ratio in it	s simplest for	rm.			
		1				
					:	[2]
						[2]
10	Simplify.					
	4f - 3g - f - 2g					
						[2]
11	Here is a ferry timetable.					
	Port A	05 00	1005	1535	20 00	
	Port B	0655			21 55	
	Port C			1820	23 10	
	Port D	00.25	13 10	10.00	22.50	
	Port E	0835	1400	1900	23 50	
	Work out the shortest time tak	ten for the jo	urney from p	ort A to por	t E.	
					h	min [2]
					h	111111 [2]
12	Work out 15 as a percentage of	of 60.				

.....% [1]

13 Expand.

$$x^2(3-x)$$

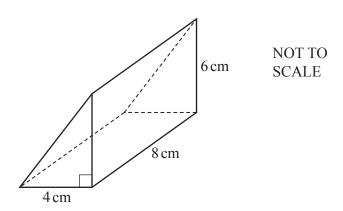
.....[2]

14 Factorise.

$$15q + 35$$



15



Work out the volume of the triangular prism.

cm ³	[3
-----------------	----

16 The table shows the number of minutes taken by 28 students to solve a problem.

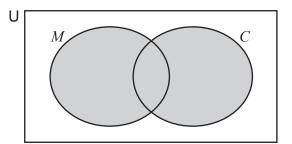
Number of minutes (<i>m</i>)	$0 < m \le 1$	$1 < m \le 2$	$2 < m \leqslant 3$	$3 < m \le 4$	$4 < m \leqslant 5$	$5 < m \le 6$
Number of students	1	5	6	10	4	2

One of these students is chosen at random.

Find the probability that this student took 3 minutes or less to solve the problem. Give your answer as a fraction in its simplest form.

EQ.
 4

17 Use set notation to describe the shaded region.



Г17
 1

18 Rearrange the formula to make *x* the subject.

$$y = \frac{x}{4} + 5$$

$$x = \dots$$
 [2]

19 U = {15, 16, 17, 18, 19, 20} P = {prime numbers}

Write down the elements of P'.

	[1]
--	-----

20 Find an expression for the *n*th term of this sequence.

45 40 35 30 25

.....[2]

Questions 21, 22 and 23 are printed on the next page.

21 Jenna cycles at an average speed of 15 km/h.

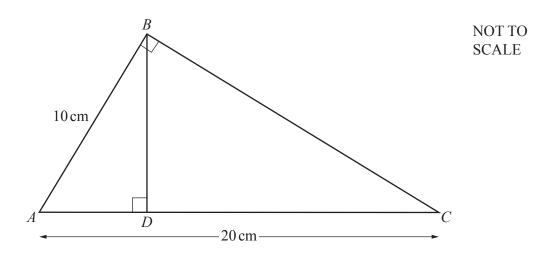
Find how many minutes she will take to cycle 10 km.

	minutes	[2]
--	---------	-----

22 Find the equation of the line parallel to y = 5x + 1 that passes through (0, -2).

 [2]

23



Triangle ABC is mathematically similar to triangle ADB. AC = 20 cm and AB = 10 cm.

Work out AD.

$$AD =$$
 cm [2]

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